

George Mason University
College of Education and Human Development

EDEP 653 Culture and Intelligence

Spring 2010

Instructor: Anthony E. Kelly, Ph.D.

Class Date & Time: Mondays, 7:20 PM - 10:00 PM in Robinson A350

Office Hours: Office Hours: 4:30-5:30 M, TH 6:00-7:00, and by appointment
(contact by email preferred)

Office Location: Commerce II Room 113B. Office Phone: 703-993-9713.

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COURSE DESCRIPTION

Explores different theoretical perspectives on intelligence as they relate to individual and cultural differences. Explores models of intelligence drawn from studies in artificial intelligence and cognitive science. Examines issues related to heritability and measures of intelligence, and intelligence in a global, cultural context.

Prerequisite

None

REQUIRED TEXTS

Dehaene, S. (2009). *Reading in the brain: The science and evolution of a human invention*. New York: Viking Penguin.

Gould, S. J. (1996). *The mismeasure of man*. New York: W.W. Norton.

Sternberg, R. J. (Ed.) (2007). *Wisdom, intelligence and creativity synthesized*. Cambridge, UK. Cambridge University Press.

Sternberg, R. J. (Ed.) (2004). *International handbook of intelligence*. Cambridge, UK. Cambridge University Press.

Recommended:

Ben-Shahar, T. (2007). *Happier*. New York: McGraw-Hill.

Kashdan, T. (2009). *Curious?* New York: HarperCollins.

NATURE OF COURSE DELIVERY

The course is structured around readings, reflections on those readings, class projects, technology activities, and papers. This course will be taught using lectures, discussions, and relevant group activities.

STUDENT OUTCOMES

This course promotes a comprehensive view of definitions and theories of intelligence by taking a global and multi-cultural perspective. Non canonical (i.e., non Anglo-US perspectives)

emphasize dimensions that consider more personal, situated and cultural aspects including theories of creativity, wisdom and happiness.

- Students will be able to develop an understanding of the educational implications of theories and research on intelligence as they relate to culture
- Students will be able to understand the historical context of research on cultural differences in intelligence
- Students will be able to identify alternative assessments with racial and ethical differences in intellectual performance
- Students will be able develop a basic understanding of alternative methods and intelligence as they relate to culture
- Students will be able to discuss the educational challenges associated with assessment on intelligence
- Students will be able to understand factors associated with cultural differences in intelligence including genetics, SES, and environmental complexity
- Students will become familiar with misconceptions about cultural group differences in intelligence
- Students will be able to develop and reinforce their critical thinking, problem solving, oral and writing skills

RELATIONSHIP TO PROGRAM GOALS AND PROFESSIONAL ORGANIZATION

The program goals are consistent with the following Learner-centered psychological principles (APA Division 15) outlined by the American Psychological Association Presidential Task Force in Education.

- Principle 1: The Nature of Learning Process
- Principle 2: Goals of the Learning Process
- Principle 3: Construction of Knowledge
- Principle 4: Strategic Thinking
- Principle 5: Thinking about Thinking
- Principle 6: Context of Learning
- Principle 10: Developmental Influences on Learning
- Principle 11: Social Influences on Learning
- Principle 12: Individual Differences on Learning
- Principle 13: Learning and Diversity

American Psychological Association (1997). Learner-Centered Psychological Principles: *Guidelines for the Teaching of Educational Psychology in Teacher Education Programs*.

Class activities. Supplementary learning/reading assignments may be assigned during class periods. Please plan to attend each class session. Active class participation is required. Please be sure the instructor has your email address for communication purposes.

Date	Class activity	Readings/Assignments
	https://implicit.harvard.edu/implicit/	Core readings are noted.
1/25 Wk 1	Introduction to course, description of syllabus, and introduction to Anglo-US theories of intelligence Gould, Introduction Chapter 1. http://www.garysturt.free-online.co.uk/gould.htm	Sternberg (2004) Chapter 15 Dehaene (2009) Introduction; Chapter 4
2/1 Wk 2	Anglo-US theories of intelligence. Spearman's g; and psychometric views of intelligence. http://www.theatlantic.com/doc/199908/student-stereotype http://www.udel.edu/educ/gottfredson/reprints/2008WISC.pdf Gould, Chapter 5, 6, Epilogue http://www.udel.edu/educ/gottfredson/reprints/2005suppressingintelligence.pdf http://wilderdom.com/personality/intelligenceCulturalBias.html http://www.pbs.org/wgbh/pages/frontline/shows/divided/etc/friday.html http://www.pbs.org/wgbh/pages/frontline/shows/divided/etc/crusade.html http://www.pbs.org/wgbh/pages/frontline/shows/divided/etc/friday.html	Sternberg (2004) Chapter 1 Sternberg (2007) Chapter 1 Dehaene (2009) Chapter 5
2/8 Wk 3	(continued) Anglo-US theories of intelligence. Spearman's g; and psychometric views of intelligence. http://www.theatlantic.com/doc/199908/student-stereotype http://www.udel.edu/educ/gottfredson/reprints/2008WISC.pdf Gould, Chapter 5, 6, Epilogue Gould Chapter 7	Sternberg (2007) Chapter 2 Sternberg (2007) Chapter 3 Dehaene (2009) Chapter 7
2/15 Wk 4	Discussion of perspectives on g, and its critiques (online). Complete article critiques for next week.	Sternberg (2007) Chapter 4 Sternberg (2007) Chapter 5 Dehaene (2009) Chapter 6
2/22 Wk 5	Expanding definitions of intelligence to include models of creativity with a framework of "successful intelligence" How US theories of intelligence frame discussions of wisdom; bring and be prepared to discuss your article critiques during class	Sternberg (2007) Chapter 6 Sternberg (2007) Chapter 7 Dehaene (2009) Chapter 1 First article review due
2/29 Wk 6	Synthesizing the relationships among intelligence, creativity and wisdom 1	Sternberg (2007) Chapter 8
3/1 Wk 7	Synthesizing the relationships among intelligence, creativity and wisdom 2; midterm retrospective; bring and be prepared to discuss	Sternberg (2003) Chapter 16

	your article critiques during class	Second article review due Dehaene (2009) Chapters 2-3
3/8	Spring Break – Presentations begin next week	Reread Dehaene (2009) Chapters 5, 7
3/15 Wk 8	Soviet/Russian perspectives on intelligence Turkish perspectives on intelligence	Sternberg (2004) Chapter 6 Sternberg (2004) Chapter 8 Dehaene (2009) Chapters 9/Conclusion
3/22 Wk 9	Indian perspectives on intelligence Nordic perspectives on intelligence	Sternberg (2004) Chapter 9 Sternberg (2004) Chapter 2
3/29 Wk 10	Japanese perspectives on intelligence French and French-speaking countries' perspectives on intelligence	Sternberg (2004) Chapter 10 Sternberg (2004) Chapter 4
4/5 Wk 11	Chinese perspectives on intelligence German and German-speaking countries' perspectives on intelligence	Sternberg (2004) Chapter 11 Sternberg (2004) Chapter 5
4/12 Wk 12	Zimbabwean perspectives on intelligence Drafts of research paper for in-class peer feedback due	Sternberg (2004) Chapter 13
4/19 Wk 13	Latin American perspectives on intelligence	Sternberg (2004) Chapter 14
4/26 Wk 14	Class discussion: How do Dehaene and Gould's views influence your considerations of "intelligence" in the light of international practices, and the readings, to date?	
5/3 Wk 15	Last day of class Reflections and discussions on cultural definitions and theories of intelligence through the lenses of creativity, wisdom and happiness.	Final research paper due, electronically Akelly1@gmu.edu Subject: "EDEP 652 Spring 2010 <your name>"

COURSE REQUIREMENTS

1. Article Critiques: Students will critique and evaluate four articles that examine culture and intelligence. Two should be a quantitative treatments, the other two qualitative treatments. There is a list of articles attached to this syllabus, you may choose 2 from that list (or substitute others with approval, see below). **[CREDIT: 2 x 10 = 20 POINTS] Quantitative critiques due week 5, and qualitative critiques due week 7.**

2. Research Paper: Students will write a comprehensive literature review and considered analysis examining how practices in different cultures influence US-Anglo definitions of intelligence as reflected through the readings and class discussions on creativity, wisdom and happiness. Students should consider at least two other cultures to form the basis of the critique of Anglo-American perspectives on intelligence. Themes to consider include: nature vs. nurture; ethnicity and culture; cultural bias, culture-fair tests; and gender differences within and between cultures. Twelve pages, single-spaced, not including references.

Research papers must adhere to the APA Publication Manual Guidelines. **[CREDIT: 60 POINTS] DUE: last day of class by electronic submission to akelly1@gmu.edu. Draft for in-class peer feedback due Week 12.**

3. Presentation on non Anglo-American perspective on intelligence. Students will be assigned readings from Sternberg's International handbook of intelligence. Based on the reading and other sources (e.g., examples of cultural practices sourced from the Internet or otherwise) the student will prepare a 50-minute presentation, which should use the following sections: (1) the definitions and theories of intelligence reported; (2) the history and influences for the definitions and theories of intelligence; (3) current research in intelligence in the chosen country; (4) a description of how intelligence is measured; (5) where definitions, theories or practices are similar to or differ from the Anglo-American perspectives, and what the implications are for theorizing about intelligence. Time will be allowed for class discussion following the presentation. **[CREDIT: 3 POINTS per section = 15 POINTS]. DATE: as assigned.**

4. Class Participation: Because of the importance of lecture and discussion in the total learning experience, students are encouraged to both attend and participate in class regularly. Attendance, punctuality, preparation, and active contribution to small and large group efforts are essential. These elements of behavior will reflect the professional attitude implied in the course goals. If students miss a class you must notify the instructor (preferably in advance) and are responsible for completing all assignments and readings for the next class. **[CREDIT: 5 POINTS]**

TOTAL CREDIT: 100 POINTS

Letter grades will be assigned as follows:

A+ 98-100% A 93-97.49% A- 90-92.49%
B+ 88-89.49% B 83-87.49% B- 80-82.49%
C 70-79.49% F below 70%

Note:

- All written assignments must be typed and must follow APA format

• Grading on written work will take into account the following factors: quality of written work, knowledge of content area, and adherence to requirements of assignment. As a graduate student, it is expected that all of your work will be turned in on the assigned dates. A late assignment is subject to a penalty of 10% of the award for every day that it is overdue.

ASSESSMENT RUBRIC FOR ARTICLE CRITIQUES

Criteria	Excellent	Adequate	Needs Significant Changes
Peer-Reviewed Research	Contains analysis of 2 empirical studies (5)	Contains analysis of 1 study (2)	General discussion that fails to analyze primary empirical studies (0)
APA Style	No significant errors (5)	Contains few significant errors in style, reader can still interpret and appreciate the content of the paper (4)	Paper does not adhere to APA-Style format (3)
Length	Paper adheres to 4 page limit (5)	Paper length is 1 page below the ascribed limit (4)	Paper is 2 or more pages short (2)
Abstract	Conveys clearly and sequentially the content of paper (5)	Gives a general overview of paper topic, but no sequential elaboration of contents (4)	Key information is not included in the summary, or abstract does not provide a clear representation of paper contents (3)
Discussion of the studies	Clearly analyzes study design, assumptions, claims, quality of evidence, and conclusions. Analyzes studies as part of a specified framework on culture and	Documents study design, assumptions, claims, type of evidence, and lists conclusions. Fails to analyze the studies' claims within a specified framework on culture and	Primarily repeats material in the studies without analysis, critique or interpretation (3)

	intelligence (5)	intelligence (3)	
Writing	Paper flows coherently, language is concise, thesis and discussion are well-structured, purpose of the paper is evident (5)	Paper conveys the main points of the topic (4)	Errors in style format make it difficult to appreciate the content of this paper (3)
Technical Merit	Contains NO major misspellings or repetitive grammatical mistakes (5)	Contains few major misspellings or repetitive grammatical mistakes (4)	Contains major misspellings and repetitive grammatical mistakes (3)
Interpretations	Insightful, original synthesis, goes beyond the scope of the literature (5)	Analytical, draws logical conclusions based upon evidence from literature (4)	Discussion does not summarize well the main points of the thesis or provide evidence from peer reviewed studies to support conclusions (3)

ASSESSMENT RUBRIC FOR RESEARCH PAPER

Criteria	Excellent	Adequate	Needs Significant Changes
Peer-Reviewed Research	Contains references to 10 or more empirical studies (5)	Contains references to 8-9 studies (4)	Does not include at least 7 peer reviewed studies (3)
APA Style	No significant errors (5)	Contains few significant errors in style, reader can still interpret and appreciate the content of the paper (4)	Paper does not adhere to APA-Style format (3)
Length	Paper adheres to 12 page limit (5)	Paper length is 1 page below the ascribed limit (4)	Paper is 2 or more pages short (3)

Abstract	Conveys clearly and sequentially the content of paper (5)	Gives a general overview of paper topic, but no sequential elaboration of contents (4)	Key information is not included in the summary, or abstract does not provide a clear representation of paper contents (3)
Discussion of the Literature	Clearly written, all topic-specific jargon are well-defined, author does not rely on quotes from papers or includes them strategically (5)	Clearly written, all topic-specific jargon are defined, author includes quotes from papers, but quotes are lengthy (4)	Too much reliance on quotes taken directly from the literature so that it interrupts the flow of the content and leaves out room for student's own synthesis of the topic (3)
Writing	Paper flows coherently, language is concise, thesis and discussion are well-structured, purpose of the paper is evident (5)	Paper conveys the main points of the topic (4)	Errors in style format make it difficult to appreciate the content of this paper (3)
Technical Merit	Contains NO major misspellings or repetitive grammatical mistakes (5)	Contains few major misspellings or repetitive grammatical mistakes (4)	Contains major misspellings and repetitive grammatical mistakes (3)
Interpretations	Insightful, original synthesis, goes beyond the scope of the literature (5)	Analytical, draws logical conclusions based upon evidence from literature (4)	Discussion does not summarize well the main points of the thesis or provide evidence from peer reviewed studies to support conclusions (3)

ASSESSMENT RUBRIC FOR PRESENTATION

Criteria	Excellent	Satisfactory	Inadequate
Time	Clearly addresses content within time	Ends within time limit, but	Overly short or overly long (time

	limit (5)	presentation not fully finished (3-4)	limit not adequately considered (0-2)
Content	Central points of the literature review are covered coherently (5)	Most points covered, but sampling from the literature review is not comprehensive (3-4)	Poorly selected points or failure to address quantitative and qualitative papers (0-2)
Organization	Clear and coherent, easy to follow (5)	Reasonably well organized, but order does work well in the time limit (3-4)	Disorganized, confusing to the audience and instructor (0-2)
Oral presentation	Articulate, professional, engaging (5)	Professional presentation, but delivery detracts from its impact (3-4)	Poor communication skills that detract significantly from the presentation (0-2)

ASSESSMENT RUBRIC FOR PARTICIPATION AND ATTENDANCE

ELEMENT	LEVEL OF PERFORMANCE			
	Distinguished (9-10 pts.)	Proficient (8 pts.)	Basic (7 pts.)	Unsatisfactory (6 or less pts.)
Attendance & Participation 10 pts. Possible	The student attends all classes, is on time, is prepared and follows outlined procedures in case of absence, the student actively participates and supports the members of the learning group and the members of the class.	The student attends all classes, is on time, is prepared and follows outlined procedures in case of absence; the student makes active contributions to the learning group and class.	The student is on time, prepared for class, and participates in group and class discussions. The student attends all classes and if an absence occurs, the procedure outlined in this section of the syllabus is followed.	The student is late for class. Absences are not documented by following the procedures outlined in this section of the syllabus. The student is not prepared for class and does not actively participate in discussions.

HONOR CODE

To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of George Mason University and with the desire for greater academic and personal achievement, we, the members of George Mason University, have set forth the following code of honor. Any individual who is caught in the act of cheating, attempting to cheat, plagiarizing, or stealing will be brought forth before a council of their peers. In the event that the individual is found guilty, he or she will be punished accordingly. See

http://www.gmu.edu/catalog/apolicies/#TOC_H12 for the full honor code.

Students must agree to abide by the university policy for Responsible Use of Computing.

See <http://mail.gmu.edu> and click on Responsible Use of Computing at the bottom of the screen.

STATEMENT REGARDING DISABILITIES:

This syllabus is subject to change based on the needs of the class. If you need course adaptations or accommodations because of a disability please inform your instructor and provide required documentation as soon as possible so that arrangements can be made.

Documentation can be obtained from the Disability Resource Center, SUB I (703)-993-2427.

Students with disabilities who seek accommodations in a course must be registered with the GMU Disability Resource Center (DRC) and inform the instructor, in writing, at the beginning of the semester. See www.gmu.edu/student/drc or call 703-993-2474 to access the DRC.

Statement of Expectations

The College of Education and Human Development expects that all students abide by the following:

- Commitment to the profession
- Commitment to honoring professional ethical standards
- Commitment to key elements of professional practice
- Commitment to being a member of a learning community
- Commitment to democratic values and social justice

See for details of these 5 expectations: <http://gse.gmu.edu/facultystaffres/profdisp.htm>

ARTICLES FOR INDIVIDUAL REVIEWS. You are encouraged to pick 2 articles from this list. If you wish to review relevant, but different article(s), please discuss your choice(s) with the instructor before beginning your reviews.

Bidell, T. T., & Fischer, K. W. (1997). Between nature and nurture: The role of human agency in the epigenesis of intelligence. In R. J. Sternberg & E. L. Grigorenko (Eds.) *Intelligence, heredity and environment* (pp. 193-242). Cambridge, England: Cambridge University Press.

Birenbaum, M., & Kelly, A. E., & Levi-Keren, M. (1994). Stimulus features and sex differences in mental rotation test performance. *Intelligence*, 19(1), 51-64.

Brody, N. (1997). Intelligence, schooling, and society. *American Psychologist*, 52, 1046-1050.

Brooks-Gunn, J., Klebanov, P. K., & Duncan, G. J. (1996) Ethnic differences in children's intelligence test scores: Role of economic deprivation, home environment, and maternal characteristics. *Child Development*, 67, 396-408.

- Brown, J. & Hudson, T. (1998). The Alternatives in Language Assessment: Advantages and disadvantages. *University of Hawaii working papers in ESL*, 16(2), 79-103.
- Chi, M., Feltovich, P., & Glaser, R. (1981). Categorization and representation of physics problems by experts and novices. *Cognitive Science*, 5, 121-152.
- Garcia, G., & Pearson, D. (1994). Assessment and diversity. In L. Darling-Hammond. *Review of Research in Education*, 20. Washington, DC. AERA
- Gardner, H. (1995). Reflections on multiple intelligences: Myths and messages. *PhiDelta Kappan*, 77, 200-209.
- Gottfried, A. E., Fleming, J. S., & Gottfried, A. W. (1994). Role of parental motivational practices in children's academic intrinsic motivation and achievements. *Journal of Educational Psychology*. 86, 104-113.
- Greenbaum, P. & Greenbaum, S. (1983). Cultural differences, nonverbal regulation, and classroom interaction: Sociolinguistic interference in American Indian education. *Peabody Journal of Education*, 61, 16-33.
- Hill, C. (1999). A national reading rest for fourth graders: A missing component in the policy debate, In B. Preseissen (Ed.). *Teaching for Intelligence 1* (pp. 128-152). Chicago, IL: Skylight,
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53, 185-140.
- Miller, P.H. (2002). Vygotsky and the Sociocultural approach (pp. 367-419) *Theories of Developmental Psychology*. New York: W. H. Freeman & Company.
- Neisser, U., Boodoo, G., Bouchard, T. J., Boykin, A.W., Brody, N., Ceci, S. J., Halperin, D. F., Loehlen, J. C., Perloff, R., Sternberg, R. J., & Urbina, S. (1996). Intelligence: Knowns and unknowns. *American Psychologist*, 51, 77-101.
- Nendoza-Denton, R., Shoda, Y., Ayduk, O., & Mischel, W. (1999). Applying cognitive- affective processing system theory to cultural differences in social behavior. In *Merging Past, Present and future in cross-cultural psychology* (pp. 205-217). Lisse, Netherlands: Swets and Zeitlinger.
- Ogbu, J. U. (1992). Understanding cultural diversity and learning. *Educational Researcher*, 21(8), 5-14, 24.
- Ogbu, J. U. (1994). From cultural differences to differences in cultural frame of references. In P. M. Greenfield and R. R. Cocking (Eds.), *Cross-cultural roots of minority child development*. Hillsdale, NJ: Erlbaum.
- Perkins, D. N. (1990). The nature and nurture of creativity. In B.F. Jones & L. Idol (Eds.) *Dimensions of thinking and cognitive instruction*. Hillsdale, NJ: Earlbaum.
- Steele, C. M. (1997). A threat in the air: How stereotypes shape the intellectual identities and performance of women and African-Americans. *American Psychologist*, 52, 613-629.
- Sternberg, R. J. (1997). The concept of intelligence and its role in lifelong learning and success. *American Psychologist*, 52, 1030-1037.
- Sternberg, R. J. (1998). Abilities are forms of developing expertise. *Educational Researcher*, 27(3), 11-20.
- Waterhouse, Lynn. (2006). Multiple Intelligences, the Mozart Effect, and Emotional Intelligence: A critical review. *Educational Psychologist*, 41(4), Fall 2006, pp. 207-225.
- Gardner, Howard, and Seana Moran. (2006). The science of Multiple Intelligences theory: A response to Lynn Waterhouse. *Educational Psychologist*, Volume 41, Issue 4, Fall 2006, pp. 227-232.